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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,347	01/26/2004	William D. Owen	67,097-035/EH-10888	1049

26096 7590 06/03/2005

CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

NGUYEN, NINH H

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SA

# Office Action Summary

Application No.

10/765,347

Applicant(s)

OWEN ET AL.

Examiner

Ninh H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☒ Claim(s) 1-15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-15 are objected to because of the following informalities:

In claim 1, line 7, the second instance of "cavities" should be deleted. Appropriate correction is required.

Claims 2-15 are objected as being dependent on claim 1.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Manning et al. (6,099,252).

Manning inherently discloses a method for making a fan blade (Fig. 1) comprising the steps of forming a first set of substantially parallel continuous rib portions (defined by cooling circuit 38) on a substrate in a first region adjacent a root edge of the substrate, wherein the first set of rib portions do not intersect one another or any other ribs; forming a second set of substantially parallel rib portions (defined by cooling circuit 34) on the substrate in a second region different from the first region, wherein the second set of rib portions do not intersect one another or any other ribs, and wherein the first set of rib portions are not parallel to the second set of rib portions;

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wherein the second region is adjacent a tip of the substrate (Fig. 1);

wherein the second region is adjacent a leading edge of the substrate (Fig. 1);

wherein the method further comprising the step of forming a first continuous cavity adjacent at least one of the first set of rib portion (Fig. 1; the third cavity from the left at the root of the turbine blade) and extending continuously adjacent at least one of the second set of rib portion.

***Allowable Subject Matter***

4. Claims 1-15, due to the limitations of a plurality of first rib portions at least partially defined by a plurality of substantially parallel, elongated, continuous first cavities formed in the first surface of the substrate in a first region, and a plurality of second rib portions at least partially defined by a plurality of substantially parallel, elongated, continuous second cavities formed in the first surface of the substrate in a second region different from the first region, wherein the first cavities are not parallel to the second cavities, would be allowable if rewritten to overcome the objection to claim 1, set forth in the "Claim Objections" of this Office action.

5. Claims 1-15, due to the limitations of a plurality of first rib portions at least partially defined by a plurality of substantially parallel, elongated, continuous first cavities formed in the first surface of the substrate in a first region, and a plurality of second rib portions at least partially defined by a plurality of substantially parallel, elongated, continuous second cavities formed in the first surface of the substrate in a second region different from the first region, wherein the first cavities are not parallel to the second cavities, are allowed.

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6. Claim 20, due to the limitation of the step of forming the first continuous cavity adjacent opposite sides of the at least one of the first set of rib portions and around a freestanding end of the at least one of the first set of rib portions, is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Prior Art***

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 1 patent.

Lee (5,997,251) is cited to show a turbine blade having different rib portions.

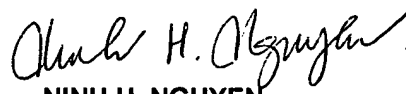
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).

  
NINH H. NGUYEN  
PRIMARY EXAMINER

Nhn  
May 26, 2005